FIG.1

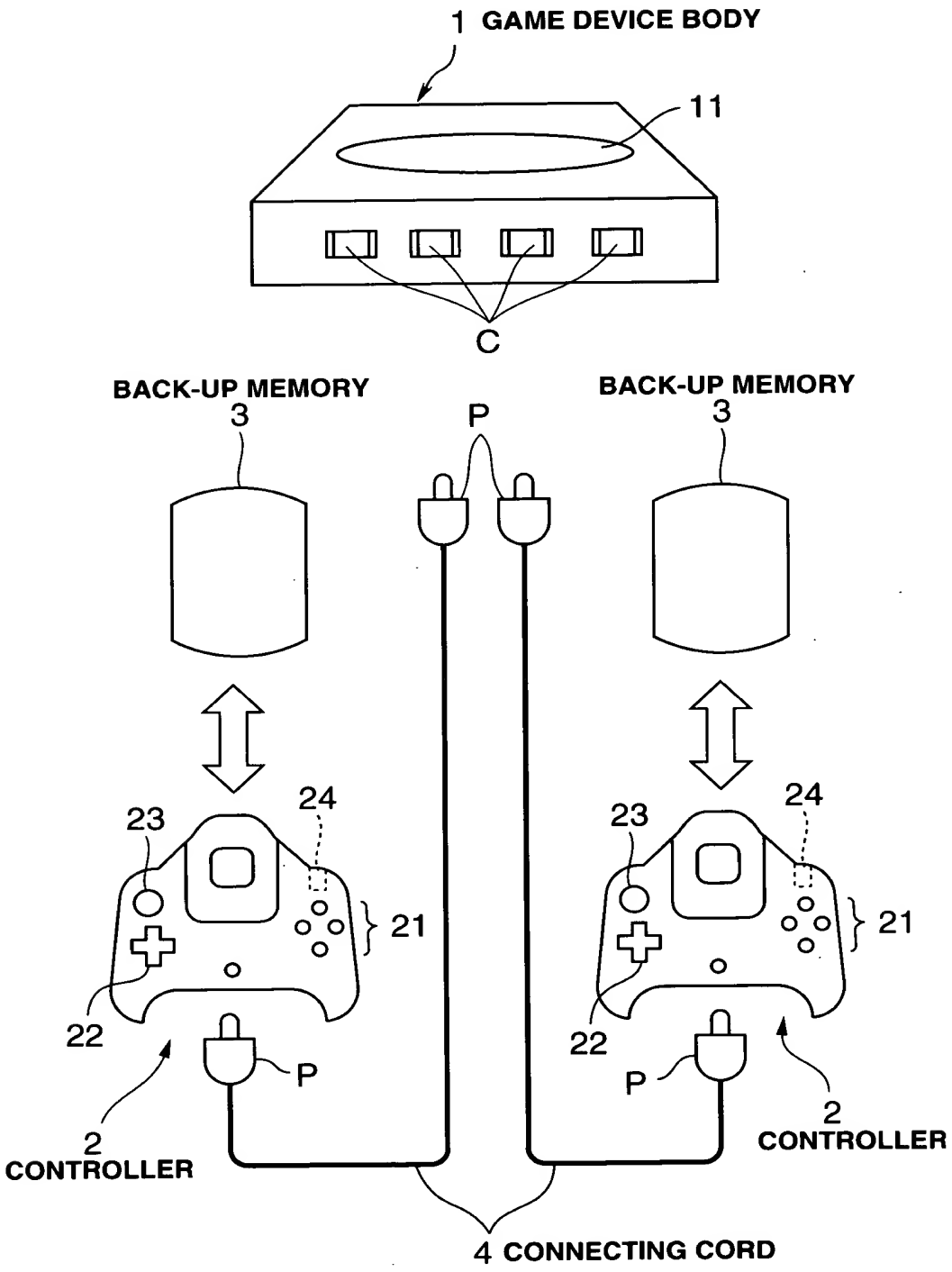

1 GAME DEVICE BODY
11
C
BACK-UP MEMORY
3
P
BACK-UP MEMORY
3
23
24
21
22
P
2
CONTROLLER
23
24
21
22
P
2
CONTROLLER
4 CONNECTING CORD

FIG.2

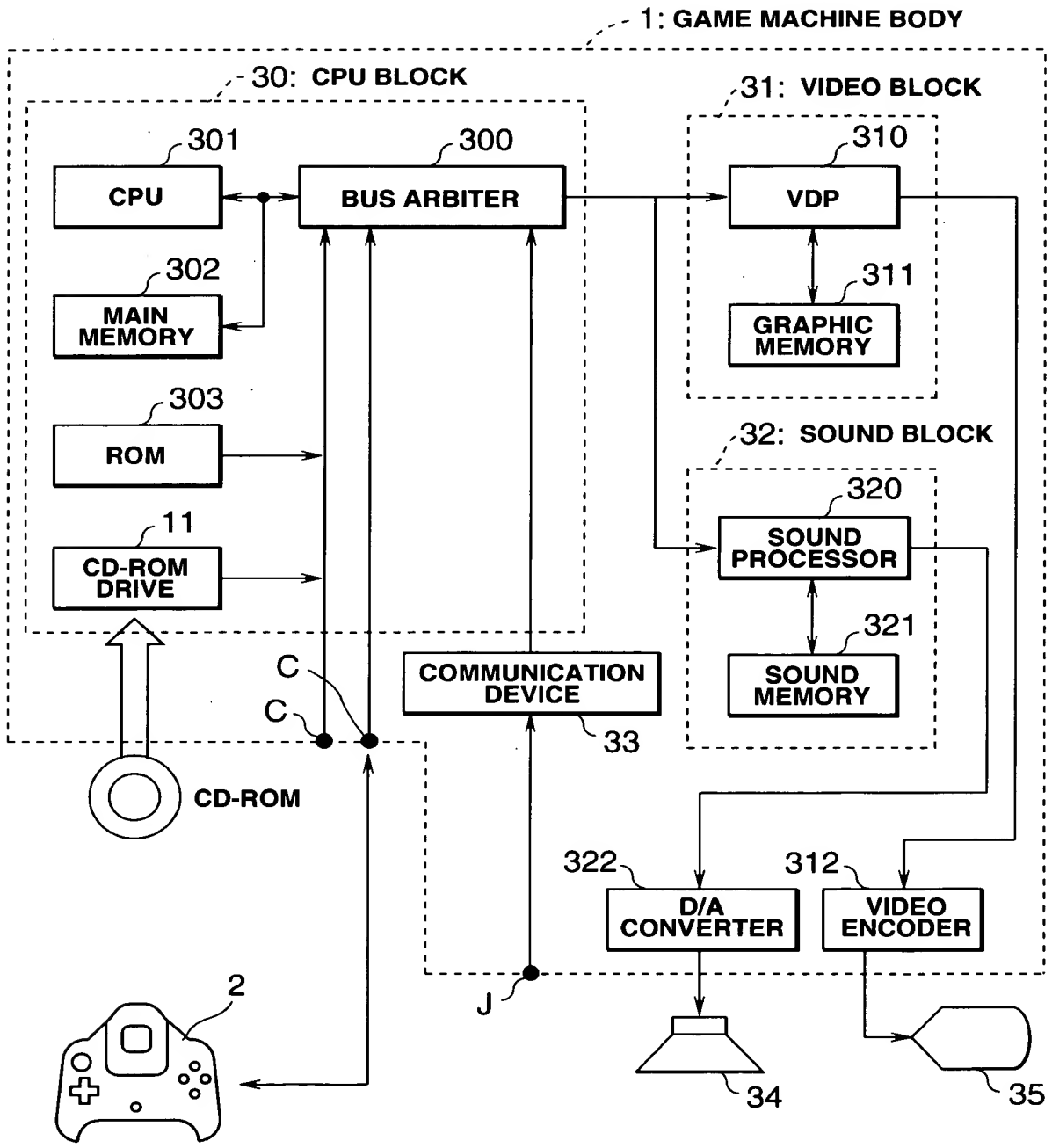

1: GAME MACHINE BODY
30: CPU BLOCK
31: VIDEO BLOCK
32: SOUND BLOCK
301
CPU
300
BUS ARBITER
310
VDP
311
GRAPHIC MEMORY
302
MAIN MEMORY
303
ROM
11
CD-ROM DRIVE
320
SOUND PROCESSOR
321
SOUND MEMORY
C
C
COMMUNICATION DEVICE
33
CD-ROM
322
D/A CONVERTER
312
VIDEO ENCODER
2
J
34
35

FIG.3

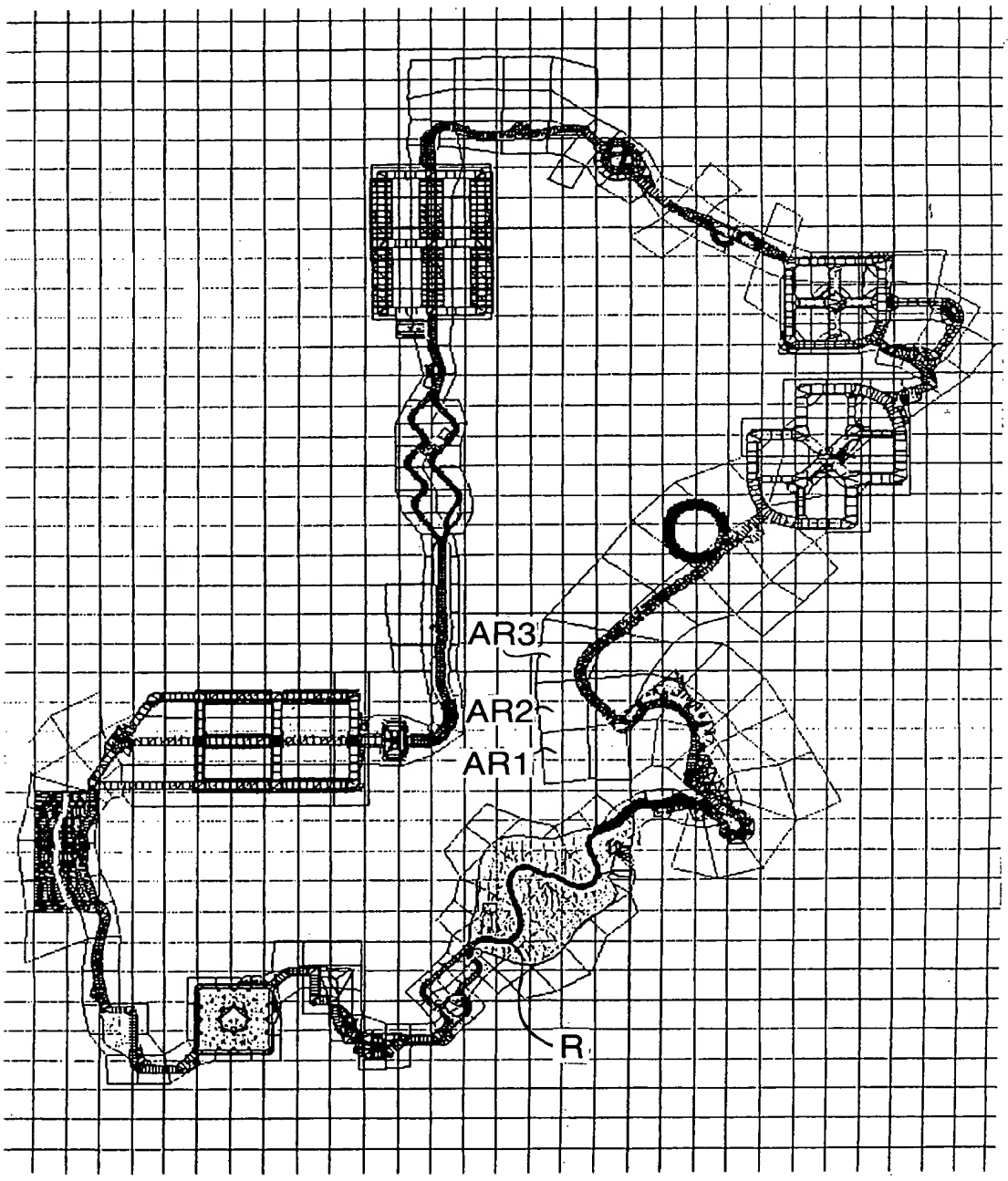
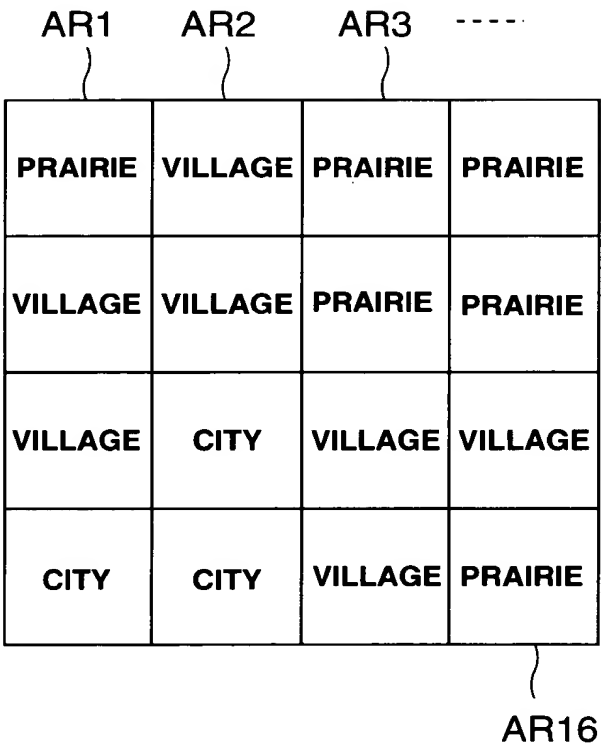


FIG.4

LANDFORM MAP



REQUIRED NUMBER OF MEMORY BLOCKS:

PRAIRIE : 1 BLOCK
VILLAGE : 2 BLOCKS
TOWN : 2 BLOCKS
CITY : 3 BLOCKS

FIG.5

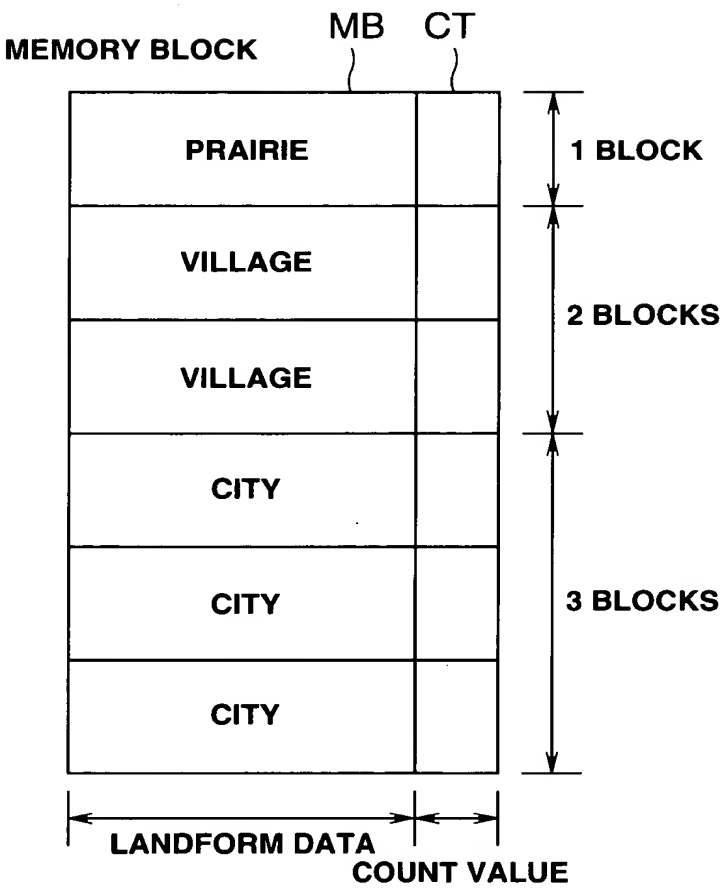

MEMORY BLOCK
MB
CT
PRAIRIE
VILLAGE
VILLAGE
CITY
CITY
CITY
1 BLOCK
2 BLOCKS
3 BLOCKS
LANDFORM DATA
COUNT VALUE

FIG.6

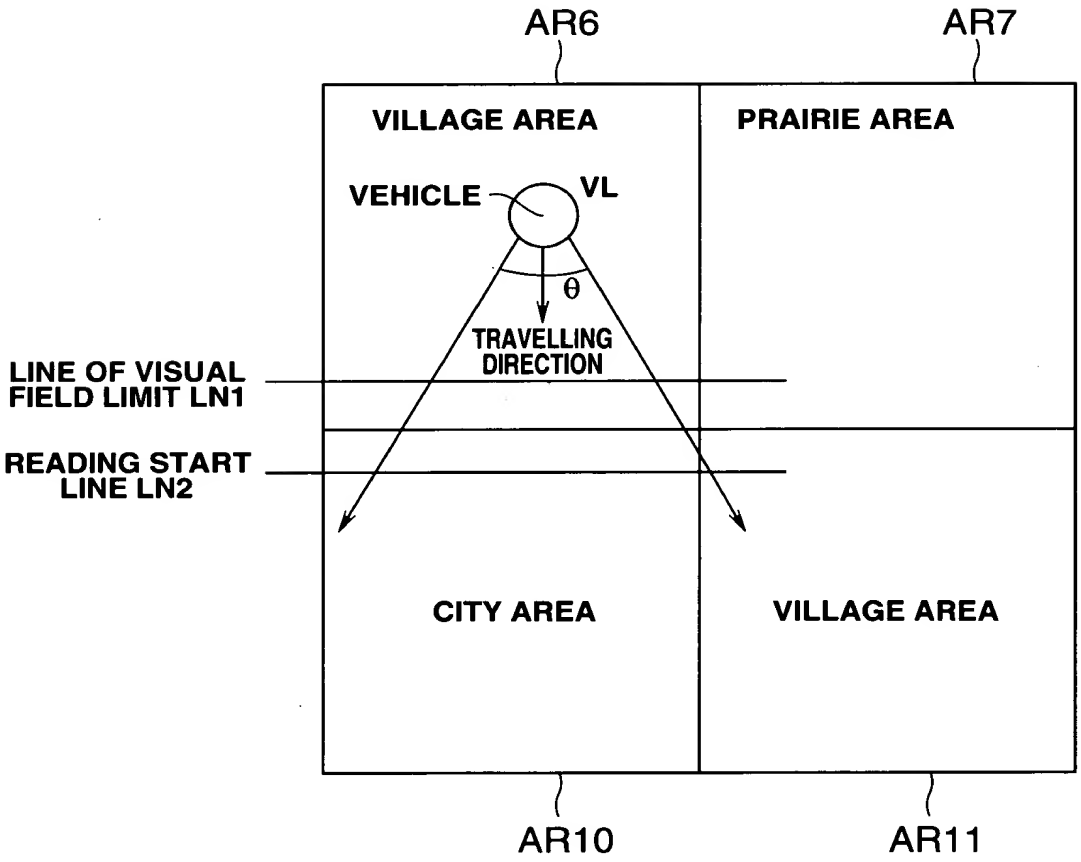

AR6
AR7
VILLAGE AREA
PRAIRIE AREA
VEHICLE
VL
θ
TRAVELLING DIRECTION
LINE OF VISUAL FIELD LIMIT LN1
READING START LINE LN2
CITY AREA
VILLAGE AREA
AR10
AR11

FIG.7

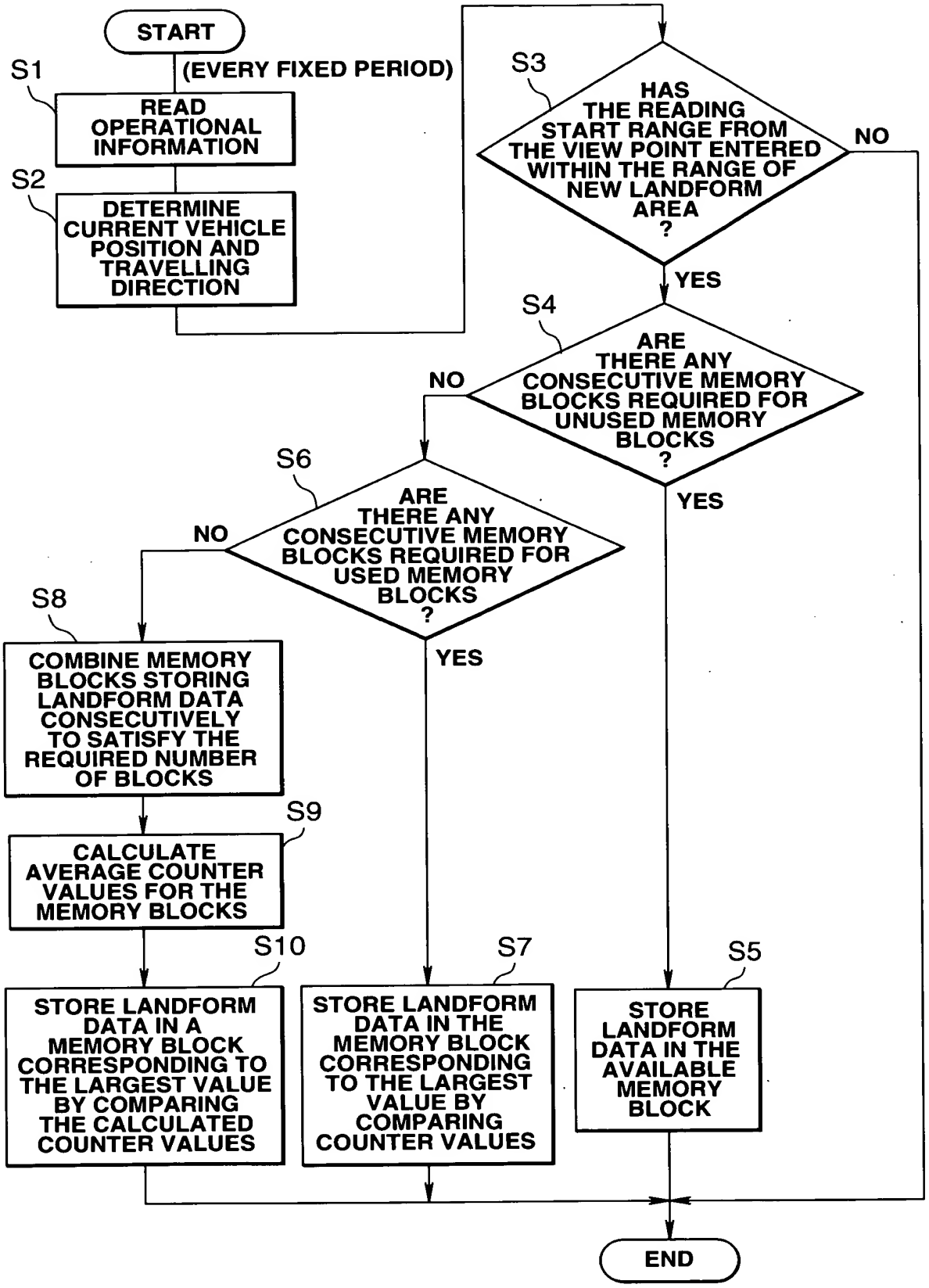

START
(EVERY FIXED PERIOD)
S1
READ OPERATIONAL INFORMATION
S2
DETERMINE CURRENT VEHICLE POSITION AND TRAVELLING DIRECTION
S3
HAS THE READING START RANGE FROM THE VIEW POINT ENTERED WITHIN THE RANGE OF NEW LANDFORM AREA ?
NO
YES
S4
ARE THERE ANY CONSECUTIVE MEMORY BLOCKS REQUIRED FOR UNUSED MEMORY BLOCKS ?
NO
YES
S6
ARE THERE ANY CONSECUTIVE MEMORY BLOCKS REQUIRED FOR USED MEMORY BLOCKS ?
NO
YES
S8
COMBINE MEMORY BLOCKS STORING LANDFORM DATA CONSECUTIVELY TO SATISFY THE REQUIRED NUMBER OF BLOCKS
S9
CALCULATE AVERAGE COUNTER VALUES FOR THE MEMORY BLOCKS
S10
STORE LANDFORM DATA IN A MEMORY BLOCK CORRESPONDING TO THE LARGEST VALUE BY COMPARING THE CALCULATED COUNTER VALUES
S7
STORE LANDFORM DATA IN THE MEMORY BLOCK CORRESPONDING TO THE LARGEST VALUE BY COMPARING COUNTER VALUES
S5
STORE LANDFORM DATA IN THE AVAILABLE MEMORY BLOCK
END

FIG.8

BLOCK No.	1	2	3	4	5	6	7	8	9	10	11
COUNT VALUE	85	85	85	80	80	90	90	90	85	85	70
USAGE STATUS	○	— ＊	— ＊	○	— ＊	○	— ＊	— ＊	○	— ＊	○
BLOCK No.	12	13	14	15	16	17	18	19	20	21	22
COUNT VALUE	10	10	5	15	15	15	0	0	0	0	0
USAGE STATUS	◎	— ＊	—◎	◎	— ＊	— ＊	+	+	+	+	+
BLOCK No.	23	24	25	26	27	28	29	30	31	32	33
COUNT VALUE	0	0	0	0	0	0	0	0	0	0	0
USAGE STATUS	+	+	+	+	+	+	+	+	+	+	+

○ : PREVIOUSLY STORED　＊ : CONSECUTIVE USAGE (" –" ALSO USED)
◎ : CURRENTLY IN USE　+ : UNUSED

FIG.9

BLOCK No.	1	2	3	4	5	6	7	8	9	10	11
COUNT VALUE	85	85	85	80	80	5	5	5	5	0	70
USAGE STATUS	○	— ＊	— ＊	○	— ＊	◎	— ＊	— ＊	— ＊	+	○
BLOCK No.	12	13	14	15	16	17	18	19	20	21	22
COUNT VALUE	60	60	55	50	50	50	60	60	45	50	50
USAGE STATUS	○	— ＊	—○	○	— ＊	— ＊	○	— ＊	○	○	— ＊
BLOCK No.	23	24	25	26	27	28	29	30	31	32	33
COUNT VALUE	40	40	40	40	30	30	30	20	20	10	10
USAGE STATUS	○	— ＊	— ＊	— ＊	○	— ＊	— ＊	○	— ＊	○	— ＊

○ : PREVIOUSLY STORED　＊ : CONSECUTIVE USAGE (" –" ALSO USED)
◎ : CURRENTLY IN USE　+ : UNUSED